

BIBLIOGRAPHY

C. FITZHUGH TALMAN, in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Banerji, Sudhansu Kumar.

Effect of the Indian mountain ranges on the configuration of the isobars. Calcutta. 1930. p. 477-502. figs. 25 cm. (Repr.: Indian journ. physics. v. 4, pt. 6.)

Carpenter, L. G.

Loss of water from reservoirs by seepage and evaporation. Fort Collins. 1898. 32 p. fig. 23 cm. (Col. agr. exp. sta. Bull. no. 45.)

Dryden, H. L., & Kuethe, A. M.

Effect of turbulence in wind tunnel measurements. Washington. [1930.] 26 p. figs. 29 cm. (Nat. adv. comm. for aeron. Report no. 342.)

Measurement of fluctuation of air speed by the hot-wire anemometer. Washington. 1929. 26 p. illus. 29 cm. (Nat. adv. comm. for aeron. Report no. 320.)

Ficker, H. von.

Die meteorologischen Verhältnisse der Insel Teneriffa. Berlin. 1930. 105 p. figs. 27½ cm. (Abhandl. preuss. Akad. Wissensch. Jahrg. 1930. Phys.-math. K1. Nr. 1.)

Geer, William C., & Scott, Merit.

Prevention of the ice hazard on airplanes. Washington. 1930. 23 p. plates. 26½ cm. (Tech. notes. Nat. adv. comm. for aeron. No. 345.) [Manifolded.]

[Great Britain.] Conference of empire meteorologists. Agric. sec.

Papers and discussions. II. London. 1929. 308 p. figs. plates. 25 cm.

International geodetic and geophysical union. Section of meteorology.

Quatrième assemblée générale, Stockholm, 14-23 août 1930. Rapport du bureau de la section. [Paris. 1930.] 20 p. 24½ cm.

Irminger, J. O. V., & Nøkkentved, Chr.

Wind-pressure on buildings. Experimental researches (first series) ... Trans. from the Danish by Alexander C. Jarvis ... and R. Halfdan-Nielsen ... København. 1930. 88 p. illus. plates (fold.) 26½ cm. (Ingeniørvidenskabelige skrifter. A Nr. 23.)

Kopp, W.

Danger of ice formation on airplanes. Washington. 1929. 14 p. fig. 26½ cm. (Nat. adv. comm. aeron. Tech. memo. no. 499.)

Leipzig. Universität. Geophysikalisches Institut und Sächs. Landeswetterwarte.

Ergebnisse der Registrierballonfahrten ... in den Jahren 1926 u. 1927. n. p. n. d. 50 p. plates. 32 cm.

Poisson, Ch.

Cyclone du 27 au 31 décembre 1927 [and others in 1928.] S, 4 p. plates. 27½ cm. (Bull. économique. Madagascar.)

Riddle, Arthur R.

Ultraviolet limit in sunlight. With some biological considerations relative thereto. p. 278-289. figs. 25½ cm. (Repr.: Amer. rev. tuberculosis. v. 21, no. 2, Feb., 1930.)

Rocard, Yves.

Sur les propriétés optiques de l'atmosphère: diffusion, absorption. p. 97-111. figs. 24 cm. (Revue d'optique. 9e année. no. 3, Mars 1930.)

Sohoni, V. V.

Meteorological normals of Calcutta. p. 237-283. figs. plate. 24½ cm. (Journ. & proc. Asiatic soc. Bengal. (new ser.) v. 25, 1929, no. 1.)

Teleki, Paul, & Nagy, Zoltán de., comps.

Oceanic, continental, Mediterranean and boreal climatic influences and mountain climate in Europe as synthesised and represented by characteristic plants. Budapest. 1930. 11 p. charts. 34½ cm. [Author, title and text in English and Magyar.]

SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING AUGUST, 1930

By HERBERT H. KIMBALL

For reference to descriptions of instruments and exposures, and an account of the method of obtaining and reducing the measurements, the reader is referred to this volume of the REVIEW, page 26.

Table 1 shows that solar radiation intensities were close to the normal intensity for August at Washington, D. C., and decidedly below at Madison, Wis., and Lincoln, Neb.

Table 2 shows an excess in the total solar radiation received on a horizontal surface directly from the sun and diffusely from the sky at Washington, Madison, and New York, a marked deficiency at Chicago and Lincoln, and a slight deficiency at Fresno and La Jolla, as compared with the normal amounts received at the respective stations in August.

Skylight polarization measurements obtained at Washington on four days during the month give a mean of 57 per cent and a maximum of 62 per cent on the 12th. At Madison measurements obtained on eight days give a mean of 48 per cent and a maximum of 59 per cent on the 12th. The values for Washington are slightly above, and

those for Madison are decidedly below, the corresponding August averages for the respective stations.

TABLE 1.—Solar radiation intensities during August, 1930

(Gram-calories per minute per square centimeter of normal surface)

Washington, D. C.

Date	Sun's zenith distance										Local mean solar time
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon
	75th mer. time	Air mass									
		A. M.					P. M.				
	e.	5.0	4.0	3.0	2.0	1.0	2.0	3.0	4.0	5.0	e.
	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.
Aug. 4.....	13.61			0.71	0.88	1.02					16.79
Aug. 7.....	17.37				0.82						11.81
Aug. 8.....	19.23				0.64	0.83					12.68
Aug. 11.....	6.27	0.76	0.85	0.97							7.29
Aug. 12.....	6.76			1.08	1.12	1.28					5.56
Aug. 19.....	10.21				0.90						9.14
Aug. 25.....	9.83	0.48	0.58	0.71	1.01	1.15					9.14
Means.....		(0.62)	(0.72)	0.87	0.90	1.07					
Departures...		±0.00	+0.05	+0.12	-0.02	-0.15					